

EXPLORING THE RELATIONSHIP BETWEEN ASSETS AND FAMILY STRESS AMONG LOW-INCOME
FAMILIES

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Abstract

The "hard times" resulting from the 2008 Great Recession represent an opportunity to re-examine the theoretical framework for how families use economic resources to manage stress. Sherraden's (1991) theory of assets and McCubbin and Patterson's (1983) Family Adjustment and Adaptation Response (FAAR) model inform this study of how assets relate to family demands among 839 low-income families. Structural Equation Modeling found that assets were directly related to a reduced sense of family demands and that assets were indirectly related to demands via economically stressful events. Findings suggest that social welfare policies that promote assets among low-income families may positively influence family relations. Future family research would benefit from measuring assets as economic resources and testing how assets affect family functioning.

Key words: assets, family, finances, low-income, strain, stress

The most recent economic recession has introduced stress to families in an enormous magnitude and scope. These "hard times" represent an opportunity to re-examine theoretical frameworks of how families use economic resources to manage stress. Within the field of applied family studies and the disciplines that intervene at the family level (e.g., counseling, psychology, social work, and sociology), economic resources are recognized to play an important role in the family functioning. Most often in research, economic resources are operationalized as income or socio-economic status. And, importantly for low-income families, eligibility for social welfare programs is based on family size-adjusted income guidelines.

The income-focused understanding of economic resources has been criticized for various reasons. In the late 1980s to early 1990s a group of scholars began to articulate the importance of asset holding as a resource for capacity building. Sherraden (1991) introduced a theory of social welfare based on the salutary effects of holding assets and proposed universal and lifelong savings accounts for every American. This theory of social welfare hinges on the idea that assets provide benefits to individuals, families, and communities that are independent from income.

Most families have been adversely affected in one way or another by the current economic recession; however, those with low-incomes have been subject to heightened strain. Low-income families are especially vulnerable during these times because small fluctuations in income can create large problems within the family and low-income families have less access to financial and other supportive services (Barr & Blank, 2009).

The purpose of this paper is to advance the understanding of family finance issues and family relations by examining how asset ownership is associated with how families make meaning of economic hardship. In this paper we make one argument: assets function as an important resource in balancing family demands. The paper first outlines the asset-based theory

of social welfare (Sherraden, 1991) and McCubbin and Patterson's (1983) Family Adjustment and Adaptation Response (FAAR) model. The conceptual model for the study is then sketched by making theoretical linkages between the asset and family stress literatures. A longitudinal dataset from a study of low-income households who participated in an Individual Development Account (IDA) program in Tulsa, OK is then used to explore the relationships between assets, indicators of stressful economic events, and financial strain.

Sherraden's Asset-based Theory of Social Welfare

Assets are defined as stocks of resources that are tangible or intangible. This study focuses on tangible assets which may consist of liquid and non-liquid assets. Liquid assets refer to resources held in savings and passbook accounts, checking accounts, retirement accounts, and stocks. Non-liquid assets include traditional forms of capital such as land, buildings (including homes) and tools.

Assets are proposed to have numerous benefits to individual, household, and social welfare. Social work scholar Sherraden (1991) originally posited that ownership of assets may lead to at least nine positive outcomes: (1) household stability, (2) an orientation towards the future, (3) development of other assets, (4) focus and specialization, (5) risk taking, (6) personal efficacy, (7) social influence, (8) political participation, and (9) the welfare of future generations. Importantly, the influences of asset holding are hypothesized to be independent of income. “While income feeds people's stomachs”, Sherraden (1991) explained, “assets change their heads” (p. 6). Income is vital for maintenance; assets are essential for development. Any benefits of asset holding are likely to occur because asset *stocks* are more permanent in nature than income *flows*. Sociologists Oliver and Shapiro (1995), Shapiro (2004), and Beth Johnson (2006)

have extended the assets framework to highlight how assets perpetuate economic inequality via racial and class stratification.

The Family Adjustment and Adaptation Response (FAAR) Model

The stress process and its impact on the family unit has long been the focus of study in the applied social sciences (Antonovsky, 1998; R. Conger & Donnellan, 2007; R. D. Conger, K. J. Conger, Matthews, & Elder, 1999; R. D. Conger, Rueter, & Elder, 1999; Hill, 1958 as cited in Patterson, 2002). One theoretical model, the Family Adjustment and Adaptation Response (FAAR) model proposes that families engage in processes to balance family demands with family capabilities all the while being influenced by family meanings to produce family-level adjustment or adaptation (H. I. McCubbin & Patterson, 1983; Patterson, 2002, 1988). The three primary concepts in the FAAR model include demands, meanings, and capabilities (Patterson, 2002, 1988). Demands are the stressors, strains, and daily hassles that disrupt normal family equilibrium. Families are different in the ways that they construe or make meaning from these demands that were introduced to the system externally or generated from within the system. Capabilities are comprised of various resources and existing coping behaviors. The FAAR model posits that family functioning is at optimal performance when there is equilibrium between demands and capabilities.

A stressor is defined as a “demand placed on the family that produces, or has the potential to produce changes in the family system” (H. I. McCubbin, Thompson, & M. A. McCubbin, 2001, p. 17). Family stress occurs when the ratio of demands to capabilities becomes imbalanced. On a daily basis, families balance demands with existing capabilities to establish stability. But, stressors are inevitably introduced to the system and a crisis occurs when there is a

period of sustained stress where there are too few resources to meet demands (H. I. McCubbin et al., 2001).

Economic resources are required by all families to manage stress. Assets are an especially important economic resource. However, most family research has overemphasized income as the source of economic well-being or does not adequately measure assets (Mistry, Lowe, Benner, & Chien, 2008; Orthner, Jones-Sanpei, & Williamson, 2004). For example, Werner and Smith's (2001) seminal Kauai study focused on chronic poverty as measured by household income as the indicator of economic resources. However, household income has limited utility as an economic resource variable. Consider that a resource is defined by McCubbin et al. (2001) as "a potential the family can call upon or can create to meet the demands it faces in a crisis situation" (p. 32). Income, however, does not meet this criterion because it is a commodity that flows every month directly into a bank account or more often among low-income families as cash often from a cash-checking service. In fact, it is impossible to draw upon income during a crisis. Surplus income, however, accumulates over time and converts to financial assets. It follows, then, that assets are a more specifically defined variable to operationalize household economic resources.

Conceptual Framework: Linking Assets to Family Stress

Based on Sherraden's theory and the FAAR model, we assume that families with assets are likely to manage economic stress better than families with similar income but no assets. What follows is our attempt to explain this process.

Direct Relationship Between Assets and Family Demands

First, assets are hypothesized to positively relate to the cognitions and behaviors of family members in ways that income cannot (Sherraden, 1991). The theory suggests that asset ownership involves choice and control that are psychologically important. For example, a family

who owns \$10,000 in assets has a number of options for how to allocate the resources to benefit members of the family. These individual and sometimes collective decisions about whether to save, spend, invest, or pay off debt relate to a sense of financial agency. The investor will gain knowledge through research of investments; the spender will consume his/her purchase; the one who pays down debt will be less worried, and so on. The management of assets develops a sense of financial and economic mastery that corresponds with beneficial cognitive, interpersonal, and behavioral capabilities. With heightened capability sets that include choice and control, individuals become free to develop and lead lives that matter to them (Sen, 1999). Having chosen and controlled their financial decisions, asset holders may be less likely to report financial strains.

Second, prolonged and systematic future planning at the individual- and family-levels is another hypothesized psychological consequence of asset holding (Sherraden, 1991; Shobe & Page-Adams, 2001). With asset stocks, family members may be more likely to imagine, dream, construct, and plan for future activities that may promote family development and coherence. Without assets, a family's prospects and expectations for development may be restricted. Assuming assets promote long-term thinking, asset holders with long-term plans may be less sensitive to short-term financial strains than families who lack assets and long-term plans.

Shifting to empirical evidence, Han (2009) studied the relationship between savings and employment status. Using a composite scale of financial strain he found that home ownership and total financial assets were negatively associated with financial strain (Han, 2009). In another study, assets were directly related (negatively) to a latent measure of economic pressure in a nationally representative study of married couples (Dew, 2007).

Indirect Relationship Between Assets and Family Demands

Asset holding may indirectly relate to family demands by reducing the likelihood of negative financial events (see figure 1). First, it is possible that assets are associated with increased earnings (i.e., a positive financial event) and employment status. A preliminary body of evidence shows that asset holding is related to earnings and economic mobility. Social work researcher Caputo (2003) demonstrated that IRAs and tax-deferred annuities were positively related to earnings mobility among a longitudinal study of youth. Zhan (2006) showed that savings or checking account ownership and net worth were significant predictors of earnings mobility among single mothers. Using the Panel Study of Income Dynamics (PSID), a recent study by economists showed that children of low-income parents with savings below the median were significantly less likely to be upwardly mobile than children of high-saving, low-income parents (Cramer, O'Brien, Cooper, & Luengo-Prado, 2009). Summarizing how assets relate to mobility from a sociological perspective, Morillas (2007) explained, “only when a minimum level of resources is guaranteed such as to provide enough welfare and security [assets], may individuals be expected to undertake investments that will result in an improvement of their opportunities [income]” (p. 811).

[PLEASE INSERT FIGURE 1 HERE]

The direct and indirect relationships between assets and family demands are consistent with what Ensel and Lin (1991) refer to as a *stress-suppressing model*. Past evidence has supported this proposition. For example, asset ownership was associated with a reduced hazard of divorce, but that relationship was mediated by marital satisfaction and feelings of structural commitment (Dew, 2009). Mistry et al. (2008) reported with path analysis that financial management strategies (a proxy variable of asset ownership and financial practices that included

(a) checking or savings ownership, (b) received loan, (c) emergency money aside, (d) credit card ownership, (e) monthly budget) was "the most consistent and strongest" predictor of economic pressure in the forms of needs and wants (p. 206). Others focused on how the lack of financial assets related to psychological stress and compromised parenting during times of economic hardship, and these relationships were more pronounced among African American men compared to white men (McLoyd, 1990).

In an effort to link the asset theory and research on how families respond to economic stress, we test the following hypotheses in this study of low-income families.

Hypothesis 1: Assets are directly associated (negatively) with family demands.

Hypothesis 2: Stressful economic events are positively related to family demands.

Hypothesis 3: Assets are indirectly associated with demands through their relationship with stressful economic events (income-to-needs ratio and job loss).

- a. Assets are positively related to the income-to-needs ratio (decrease in the income-to-needs ratio indicates a stressful economic event).
- b. Assets are negatively related to job loss (acute stressful economic event).

Method

In this study we exploited a dataset collected to evaluate an Individual Development Account (IDA) program in Tulsa, OK called Community Action Project of Tulsa County (CAPTC). The CAPTC IDA initiative was a two year program that provided a matched savings subsidy of 2:1 for withdrawals used for home purchase, and a match rate of 1:1 for all other approved uses (i.e., home repair, small business investment, and retirement accounts). The program also required participants to complete 12 hours of general financial education and asset-specific financial education before withdrawal (Schreiner et al., 2001). The dataset included

variables to test the relationships between resources (assets), stressors (negative financial events), and demands (financial strain) among low-income families.

Data and Sample

Families who participate in IDAs are generally characterized as “working poor”. They are likely to be employed and to have more education than the poor in general. However, IDA participants seem to be among the more disadvantaged of the “working poor” in that they are likely to be female, African American, and single (Schreiner et al., 2001). The CAPTC IDA program started with 1,103 eligible participants who responded to general announcements for the program. To be eligible, participants had to be employed at baseline and total household income had to be below 150% of the federal poverty line. Household income for a family four at 150% of the poverty line in 1999 was \$22,050 (*Prior HHS Poverty Guidelines*, 2008).

Detailed information was collected by personal interview from each CAPTC participant at baseline and at two subsequent points (18 month and 48 month). We utilized data from interviews collected at baseline in 1999 (Wave 1) and 48 months later in 2003 (Wave 3). The surveys collected socioeconomic demographics as well as data on income, assets, employment status, financial strain, and characteristics related to saving behaviors. Study attrition reduced sample size in this study from 1,103 to 839 (76 percent of the total sample) at Wave 3. A previous study found that males, married individuals, and non-whites were likely to leave the study (Han, Grinstein-Weiss, & Sherraden, 2009).

Analysis

Structural Equation Modeling (SEM) was used to test the hypotheses in this study. We first tested measurement models of latent asset and financial strain variables. Second, we tested two SEM models: (a) a simple model to assess the direct association of assets and demands, and

(b) a full model of the relationship between assets, indicators of stressful economic events, and family demands. Specifically, the dependent variable (family demands at Wave 3) was regressed onto the independent variable (assets at Wave 1) and mediating variables (indicators of economic stress between Wave 1 and Wave 3). Based on a previous study (Dew, 2007), we model assets endogenously. In other words, assets were first regressed on Wave 1 covariates instead of allowing the control variables to covary with assets.

Measures

The CAPTC data included several measures of assets. We created a latent asset variable using three Wave 1 asset indicators: home value, estimated value of liquid assets, and estimated value of retirement savings. All variables were self-reported. Liquid assets are the balance of checking and savings accounts and cash on hand. Retirement savings include values of IRA accounts and 401(k)s, 403(b)s, and other pension accounts. Each variable was transformed using a base 10 log transformation to correct for skewed distribution.

Two manifest indicators of stressful economic events included the income-to-needs ratio at Wave 3 and employment loss between Wave 1 and Wave 3. The income-to-needs ratio is the ratio of household income divided by the family size adjusted poverty guidelines. The ratio is used to measure proximity to poverty. A family with income-to-needs ratio below 1 is living in poverty; a ratio above 1 is not in poverty. The federal poverty guidelines for an average family of four were \$16,700 at Wave 1 and \$18,400 at Wave 3 (*Prior HHS Poverty Guidelines*, 2008). Because we included income-to-needs ratio at Wave 1 as a covariate (see below), the income-to-needs ratio at Wave 3 was conceptualized as a change variable. Using this rationale, a negative change in the income-to-needs ratio was thus an indicator of a stressful economic event, and vice-versa. From Wave 1 to Wave 3, 34% ($n = 289$) of the sample experienced a decrease in the

income-to-needs ratio; the remaining 64% ($n = 600$) experienced an increase. Employment loss was dummy-coded for individuals who lost a job at Wave 3 (1 = employment loss; 0 = reference). All participants at Wave 1 were employed because employment was an eligibility requirement of the Tulsa IDA program.

The latent variable of financial strain was measured with nine-items at Wave 1 and Wave 3. Financial strain serves as a proxy indicator of family demands in the conceptual framework described above. As a construct, financial strain is a broad psychological assessment of the economic stress felt by the family. The respondent was asked to appraise the family's current economic situation and determine whether the family has enough money to afford a home, furniture, car, food, medical care, clothing, money for leisure, paying bills, and to save at the end of the month. Each item was answered dichotomously (yes/no). Items were reverse scored to generate a measure of financial strain. Cronbach's alpha test suggested moderate reliability for the financial strain measure at Wave 1 (Cronbach $\alpha = .75$) and Wave 3 (Cronbach $\alpha = .84$).

Eight control variables from Wave 1 were included in the analysis. These included (a) age, (b) education, (c) income-to-needs ratio, (d) married (yes/no), (e) number of children, (f) gender, (g) ethnicity (African American and Others), and (h) total liabilities. Education was measured at the ordinal level with 0 = no college, 1 = some college, 2 = two year degree, and 3 = bachelor's degree or more. Total liabilities included the self-reported values of household bills, outstanding credit card debt, student loans, personal loans, vehicle loans, home mortgages, and medical bills. The total liability variable was transformed with log base 10. These covariates have been frequently used in previous studies testing asset effects (Dew, 2007; Han, 2009; Han et al., 2009). Since African American IDA participants have different saving outcomes compared to other ethnicity groups (Han, 2009; Han et al., 2009), we divided the participants into two groups,

African Americans and others. Others include Whites, Asian Americans, and Hispanics.

Results

Descriptive and Bivariate Results

The descriptive results demonstrated that the sample, on average, had low-assets. Among the sample, 14% reported zero liquid assets. Only 24% of the sample was home owners at Wave 1 and just over one-fifth reported any type of retirement assets. The income-to-needs ratio at Wave 1 showed the sample is low-income with an average ratio of 1.3. The sample had relatively low educational achievement with 31% who reported having no postsecondary education. Full details of the sample are reported in Table 1.

[INSERT TABLE 1 ABOUT HERE]

Bivariate Pearson correlations between key variables were then analyzed (see Table 2). The correlations lend initial support for the study hypotheses. Assets were negatively related to family demands at Wave 3 ($r = -.41; p < .001$). Additionally, the two indicators of stressful events were related to demands in the expected directions: income-to-needs ratio at Wave 3 ($r = -.40; p < .001$) and job loss between Wave 1 and Wave 3 ($r = .41; p < .001$). Assets were positively associated with the income to needs ratio at Wave 3 ($r = .27; p < .001$) and negatively related to job loss between Wave 1 and Wave 3 ($r = -.24; p < .001$).

[INSERT TABLE 2 ABOUT HERE]

Measurement Model of Demands

We tested the validity of the family demands construct by Confirmatory Factor Analysis (CFA) of the financial strain measure. Model fits were assessed using the chi-square tests, root means square error of approximation (RMSEA), and the comparative fit index (CFI). Findings suggested the measure of family demands was moderately validated with the data ($\chi^2 (22, N =$

838) = 146.201, $p < .001$; $CFI = .97$; $RMSEA = .08$). Factor loadings ranged from .66 to .92.

Results of Structural Equation Modeling

We constructed two structural equation models to explore the aforementioned hypotheses. The statistical modeling program Mplus was used for the analyses. Mplus supports the analysis of binary (categorical) variables that are observed in a structural equation model (i.e., job loss in this study). The models were estimated by weighted least square (WLS) parameter estimates that use a diagonal weight matrix with standard errors and mean- and variance-adjusted chi-square test statistics that use a full weight matrix (L. Muthén & B. Muthén, 2007). Because of the WLS estimation, path coefficients for dichotomous variables should be interpreted as probit regression coefficients. Fit of the structural models were evaluated based on statistics of .05 or less for RMSEA and .90 or more for CFI. One case was removed because of erroneous data and 75 observations were listwise deleted from the models because of missing values, resulting in an adjusted sample size of 763.

The first model included two steps. First, assets were modeled endogenously on W1 covariates. The second step modeled assets plus covariates on the latent construct of family demands (total model results not presented). The model fit statistics of this simple model indicated a moderate to poor fit ($\chi^2(166, N=763) = 575.86$; $p < .001$; $RMSEA = .06$; $CFI = .89$). Controlling for Wave 1 family demands and other covariates, assets had a direct and significant influence on Wave 3 family demands ($\beta = -.27$; $p < .001$).

[INSERT FIGURE 2 ABOUT HERE]

The full model included the indicators of economically stressful events as mediators. Model fit statistics of the structural model suggested the data adequately fit the theoretical model ($\chi^2(179, N=763) = 590.67$; $p < .001$; $RMSEA = .05$; $CFI = .90$). Similar to the bivariate

correlations, the structural model results appeared to support the hypotheses (see Figure 2 for the structural model and Table 3 for measurement model). Wave 1 assets were significantly related to Wave 3 family demands in the expected direction after controlling for covariates and Wave 1 family demands ($\beta = -.18; p < .05$). This supported hypothesis 1. As expected, adding the mediating relationships reduced the strength of association between assets and demands (from $-.27$ to $-.18$). Supporting hypothesis 2, the income-to-needs ratio and job loss were significantly related to family demands in the expected directions ($\beta = -.21; p < .001$ and $\beta = .17; p < .001$, respectively) and significantly related to assets at W1 ($\beta = .19; p < .001$ and $\beta = -.37; p < .001$, respectively). The Sobel (1982) test in Mplus was used to determine whether the mediating relationships with family demands were significantly different from zero. Results suggested both mediating relationships were significant: $b = -.02 (.01), p < .01$ for income-to-needs; $b = -.03 (.01), p < .05$ for job loss. The significant associations between assets, indicators of financially stressful events, and demands that were maintained in the model supported hypothesis 3. A comparison of the model fits between the full model and a constrained model (mediating paths constrained to zero) was conducted by a chi-square test and showed the full model was a better fit of the data ($\chi^2 = 534.31; p < .001$).

[INSERT TABLE 3 ABOUT HERE]

Discussion

This exploratory study aims to bridge the gulf between the assets theory and family research by examining whether the relationship between household assets and family demands are direct, indirect, or both. Furthermore, the study seeks to fill a gap in the literature by studying these relationships among a unique sample of low-income families in Tulsa, Oklahoma.

Results indicate that holding assets at Wave 1 is directly associated with lower financial

demands at Wave 3 and directly associated with lower chances of economically stressful events. Furthermore, findings suggest that assets relate to demands indirectly via stressful events. In sum, these direct and indirect associations substantiate the idea that assets have what Ensel and Lin (1991) describe as a stress-suppressing relationship to family demands. This complex link of assets is important in the context of the stresses currently being experienced, disproportionately by low-income families, during the 2008 economic recession.

The finding that assets are negatively related to family demands four years later (Wave 3) after controlling for Wave 1 family demands and covariates indicates a particularly robust relationship. This differs slightly from previous research that showed assets have indirect influence on some family variables (e.g., marital outcomes; R. D. Conger et al., 1993; R. D. Conger, Ge, & Lorenz, 1994; Dew, 2007). One plausible mechanism is that assets involve a “command over resources across time” (Sherraden, 1991, p. 146). This choice and control likely allowed families to make household economic decisions between Wave 1 and Wave 3 that may have increased consumption of household goods measured by the family demands items (e.g., furniture, clothes, leisure, cars, etc). Additionally, asset holding is hypothesized to promote further asset development (Sherraden, 1991). Therefore, Wave 1 asset holding may have been positively related to Wave 3 asset holding which would likely correlate negatively with family demands.

Not surprisingly, both indicators of economic stress were negatively related to family demands (supporting hypothesis 2). When families reported a reduction in the income-to-needs ratio or a job loss, then family demands were likely to increase. With stable employment and earnings, the addition of a household member can reduce greatly the income-to-needs ratio. Post-hoc analysis showed that an increase in the number of children between Wave 1 and Wave 3 was

significantly and positively associated with a decrease in the income-to-needs ratio (results not shown). An additional mouth to feed, *ceteris paribus*, will probably increase financial strain. A reduced income-to-needs ratio may relate to reduced assets and higher financial strain. For example, Dynarski and Gruber (1997) found that each dollar loss in earnings due to unemployment resulted in 20 to 25 cents decrease in net worth. Even more relevant to feelings of financial strain, and relevant during the current recession, is job loss. As unemployment hovers around 10% for the first time in a generation, family demands are increasing on a large scale. We suspect these stresses are more pronounced for families living below or near the poverty line. Previous studies demonstrated how assets are frequently used to compensate for lost earnings from unemployment (Lebergott, 1964) and how unemployed households are likely to have less assets and higher financial strains (Dynarski & Gruber, 1997; Hira, 1987; Xiao, 1996). These findings substantiate the need to ensure access to asset-building and asset-protecting mechanisms across the income distribution, not just for the middle class and wealthy. Furthermore, policies that discourage wealth accumulation among the poor (e.g., asset limits inherent in income maintenance programs such as Temporary Aid to Needy Families [TANF]) are especially problematic.

Findings support the third hypothesis. Holding assets at a given time may improve future economic circumstances of families because of a positive association with income relative to needs and a negative association with job loss. This reduced likelihood of economic stressor, then, may be indirectly associated with a reduction in family demands. This builds upon the sociological and poverty literature relating assets to mobility and opportunity (Caputo, 2003; Morillas, 2007; Oliver & Shapiro, 1995; Zhan, 2006). Assets are likely to improve earnings because assets function as an insurance stock that promotes risk taking in the labor market (Morillas, 2007). Additionally, assets, particularly liquid assets, may promote human capital

development (Zhan, 2006). Such knowledge and skills development may negatively relate to employment loss. Ownership of assets for low-income families may make relatively large impact on their economic opportunities and related family demands.

Limitations

This study is not without limitations that relate to the findings. First, the CAPTC sample is not nationally representative of the low-income population. Families in the sample may be unique from other low-income families because of their interest in savings and asset accumulation. Second, measurement was likely to influence the findings. For example, the second stressful economic event indicator (job loss) was measured dichotomously. As a result, we are unable to discriminate between an individual with a steady labor history who happened to be unemployed at Wave 3 from an individual who was chronically unemployed between Wave 1 and Wave 3. The second measure of economic events, the income-to-needs ratio, is not without problems. Poverty measurement based on the income-to-needs of 1.0 has been widely criticized for being insufficient for a family to meet basic needs; alternative measures have been proposed (Citro & Michael, 1995). Additionally, the financial strain measure was developed post-hoc. More detailed measures of stressful economic events and financial strains may improve the model fits of the SEM models. Third, many factors that are known to affect family stress, adjustment, and adaptation are not included in this study. We have not examined how community resources and institutions influence assets, economic events, and financial strain. Because the limitations above influence the findings of the study, readers should be careful in generalizing the results to other populations.

Implications

Based on the findings presented, several implications for future asset-based research are outlined. First, studies of asset-based programs would be stronger if they examined how asset ownership and asset policies affect family functions. Patterson (2002) identified four important family functions that may be associated with asset ownership: (a) membership and family formation; (b) economic support; (c) nurturance, education, and socialization; and (d) protection of vulnerable members. Furthermore, research is needed to examine the extent to which assets are related to family cohesion, warmth, affection, emotional support, sense of togetherness, practice of family rituals and traditions and collective efficacy, all factors that are associated with family resilience (Chadiha, 1992; Crosnoe, Mistry, & Elder, 2002; H. I. McCubbin, Thompson, & M. A. McCubbin, 1996; H. I. McCubbin & M. A. McCubbin, 1988; Mistry et al., 2008).

Second, while at least one study of the resiliency process highlighted a need for research to consider assets (Mistry et al., 2008); we suspect that not enough family studies are measuring assets. Future studies should include more specific measures of economic resources such as liquid and non-liquid assets and include these variables in their analyses. This is particularly important for programs that intervene at the family level.

There are many unanswered questions about how assets affect family well-being and functioning. At least four dimensions of asset holding should be carefully examined in future work on assets and the family. The first dimension is *asset type*. To date, the field of asset ownership has not consistently specified the type of assets that matter for certain outcomes. Some studies focus on home ownership (DiPasquale & Glaeser, 1999; Green & White, 1997); others on net worth or assets to debts ratio (Williams Shanks, 2007; Zhan, 2006), and yet others on savings balances (Yadama & Sherraden, 1996). The second dimension is *adequacy*. Again,

research has not carefully specified the quantity of assets that will matter for certain outcomes. Future research needs to address the question: How much of a given asset is adequate to produce a given outcome? The third issue is about the *developmental history* of the owned assets. We speculate that the influence of earned assets (e.g., savings, investments, home equity, etc) on family relations may differ compared to unearned assets (e.g., inheritances, bequests, and gifts at critical stages in the family life course such as weddings and home down payments). Last is intended *asset function*. How the asset(s) are intended to be used by a family may determine how the asset(s) associate with family functioning. For example, acquired home equity is a passive form of asset ownership whereas the management of liquid financial assets involves more human agency.

The field would benefit from future research that considers alternative mechanisms by which assets influence family functioning. Specifically, studies should test the moderating role of assets. Theory abundant suggests that assets will smooth income shocks. “When assets are present”, Sherraden (1991) explained, “the family is less likely to fall into chaos, and more likely to maintain social and economic equilibrium until sufficient income can be reestablished” (p. 149). Moreover, studies should continue the line of inquiry in this study to clarify whether assets function directly on family demands or have indirect, buffering, mechanisms as suggested by previous studies of economic resources and marital relations (R. D. Conger et al., 1993; R. D. Conger et al., 1994).

While this study argues the importance of assets for family functioning, they are not seen as a panacea to ameliorate family stress. Some have cautioned against overemphasizing protective factors such as assets and concluded that *risk* may be a more influential variable in the development of behavior problems (Pollard, Hawkins, & Arthur, 1999). Under a risk framework

(instead of an assets framework like that presented in this study) and building on previous findings (Dew, 2007), future research might advance the understanding of how liabilities and assets function differently in the assessment of family financial relations. Debts could be modeled independently and endogenously as assets were modeled in this study.

Conclusion

The global recession of 2008 has introduced enormous financial hardship to families across the income distribution. Understanding the relationship between family financial resources and family relations is critically important to design interventions and policies to reduce the negative impact of these stressors. This paper demonstrates that asset ownership is directly associated with demands on the family system and indirectly associated with family demands by a reduced likelihood of encountering future negative financial events. It follows that lower perceived demands will likely lead to more healthy adjustment and adaptation to the economic hardship that many low-income families are currently experiencing.

Asset-based policies have shown promise in promoting savings and asset development among the poor (Sherraden, 2008). However, the expansion of policies to promote assets among low-income families (e.g., IDAs) has outpaced the knowledge about their impacts, especially at the family-level. Future research on assets and family functioning will advance both fields: family researchers will better understand how diverse economic resources (assets in addition to income) relate to family relations, and asset researchers focusing on the family will move beyond the current focus on individual-level outcomes.

References

- Antonovsky, A. (1998). *Stress, coping, and health in families: Sense of coherence and resiliency*. Thousand Oaks, CA: Sage Publications.
- Barr, M. S., & Blank, R. M. (2009). Savings, assets, credit, and banking among low-income households: Introduction and overview. In R. M. Blank & M. S. Barr (Eds.), *Insufficient funds: Savings, assets, credit, and banking among low-income households*. New York: Russell Sage Foundation.
- Beth Johnson, H. (2006). *The American Dream and the power of wealth: Choosing schools and inheriting inequality in the land of opportunity*. Routledge: New York.
- Caputo, R. (2003). Assets and economic mobility in a youth cohort, 1985-1997. *Families in Society*, 84(1), 51-62.
- Chadiha, L. A. (1992). Black husbands' economic problems and resiliency during the transition to marriage. *Families in Society*, 73, 542-552.
- Citro, C. F., & Michael, R. T. (1995). *Measuring poverty: A new approach*. National Academy Press.
- Conger, R., & Donnellan, M. (2007). An interactionist perspective on the socioeconomic context of human development. *Annual Review of Psychology*, 58, 175-199.
- Conger, R. D., Conger, K. J., Elder, G. H., Lorenz, F. O., Simons, R. L., & Whitbeck, L. B. (1993). Family economic stress and adjustment of early adolescent girls. *Developmental Psychology*, 29, 206-219.
- Conger, R. D., Conger, K. J., Matthews, L. S., & Elder, G. H. (1999). Pathways of economic influence on adolescent adjustment. *American Journal of Community Psychology*, 27, 519-540.

- Conger, R. D., Ge, X. J., & Lorenz, F. O. (1994). Economic stress and marital relations. In *Families in troubled times* (pp. 187-203). New York: Aldine de Gruyter.
- Conger, R. D., Rueter, M. A., & Elder, G. H. (1999). Couple resilience to economic pressure. *Journal of Personality and Social Psychology*, 76, 54-71.
- Cramer, R., O'Brien, R., Cooper, D., & Luengo-Prado, M. (2009). *A penny saved is mobility earned*. Washington, D.C.: New America Foundation. Retrieved from http://www.newamerica.net/publications/policy/penny_saved_mobility_earned
- Crosnoe, R., Mistry, R., & Elder, G. H. (2002). Economic disadvantage, family dynamics, and adolescent enrollment in higher education. *Journal of Marriage and Family*, 64, 690-702.
- Dew, J. (2009). The gendered meaning of assets for divorce. *Journal of Family and Economic Issues*, 30, 20-31.
- Dew, J. (2007). Two sides of the same coin? The differing roles of assets and consumer debt in marriage. *Journal of Family and Economic Issues*, 28, 89-104.
- DiPasquale, D., & Glaeser, E. (1999). Incentives and social capital: Are homeowners better citizens? *Journal of Urban Economics*, 45(2), 354-384.
- Dynarski, S., & Gruber, J. (1997). Earnings instability and family living standards. *Brookings Papers on Economic Activity*.
- Ensel, W. M., & Lin, N. (1991). The life stress paradigm and psychological stress. *Journal of Health and Social Behavior*, 32, 321-341.
- Green, R. K., & White, M. J. (1997). Measuring the benefits of home owning: Effects on children. *Journal of Urban Economics*, 41, 441-461.
- Han, C. K. (2009). Unemployment, financial hardship, and savings in Individual Development Accounts. *Journal of Poverty*, 13(1), 74-95.

- Han, C. K., Grinstein-Weiss, M., & Sherraden, M. (2009). Assets beyond savings in Individual Development Accounts. *Social Service Review*, 83(2), 221-244.
- Hira, T. K. (1987). Money management practices influencing household asset ownership. *International Journal of Consumer Studies*, 11(2), 183-194.
- Lebergott, S. (1964). *Men without work: The economics of unemployment*. Englewood Cliffs, NJ: Prentice-Hall.
- McCubbin, H., Thompson, A., & McCubbin, M. (1996). *Family assessment: Resiliency, coping and adaptation: Inventories for research and practice*. Madison, WI: University of Wisconsin Publishers.
- McCubbin, H. I., & McCubbin, M. A. (1988). Typologies of resilient families: Emerging roles of social class and ethnicity. *Family Relations*, 37(3), 247-254.
- McCubbin, H. I., & Patterson, J. (1983). The family stress process: The Double ABCX Model of adjustment and adaptation. In *Social stress and the family: Advances and developments in family stress theory and research* (pp. 7-37). New York: Haworth.
- McCubbin, H. I., Thompson, A. I., & McCubbin, M. A. (2001). *Family measures: Stress, coping and resiliency*. Honolulu, HI: Kamehameha Schools.
- McLoyd, V. C. (1990). The impact of economic hardship on Black families and children: Psychological distress, parenting, and socioemotional development. *Child Development*, 61, 311-346.
- Mistry, R., Lowe, E., Benner, A., & Chien, N. (2008). Expanding the family economic stress model: Insights from a mixed-methods approach. *Journal of Marriage and Family*, 70(1), 196-209.
- Morillas, J. R. (2007). Assets, earnings mobility and the Black/White gap. *Social Science*

- Research*, 36, 808-833.
- Muthén, L., & Muthén, B. (2007). *Mplus user's guide, Fifth edition*. Los Angeles, CA: Muthén & Muthén.
- Oliver, M., & Shapiro, T. (1995). *Black Wealth/White Wealth: A new perspective on racial inequality*. New York: Routledge.
- Orthner, D. K., Jones-Sanpei, H., & Williamson, S. (2004). The resilience and strengths of low-income families. *Family Relations*, 53(2), 159-167.
- Patterson, J. (2002). Integrating family resilience and family stress theory. *Journal of Marriage and Family*, 64, 349-360.
- Patterson, J. (1988). Families experiencing stress: The family adjustment and adaptation response model. *Family Systems Medicine*, 5(2), 202-237.
- Pollard, J. A., Hawkins, J. D., & Arthur, M. W. (1999). Risk and protection: Are both necessary to understand diverse behavioral outcomes in adolescence? *Social Work Research*, 23(3), 145-158.
- Prior HHS poverty guidelines and Federal Register References. (2008, July 18). Retrieved from <http://aspe.hhs.gov/POVERTY/figures-fed-reg.shtml>
- Schreiner, M., Sherraden, M., Clancy, M., Johnson, L., Curley, J., Grinstein-Weiss, M., et al. (2001). *Savings and asset accumulation in Individual Development Accounts* (No. CSD Report 01-23). St. Louis, MO: Washington University, Center for Social Development. Retrieved from http://csd.wustl.edu/Publications/Documents/ADDReport_2001.pdf
- Sen, A. (1999). *Development as freedom*. New York: Knopf.
- Shapiro, T. (2004). *The hidden costs of being African American: How wealth perpetuates inequality*. Oxford: Oxford University Press.

- Sherraden, M. (1991). *Assets and the poor: A new American welfare policy*. Armonk, NY: M.E. Sharpe.
- Sherraden, M. (2008). *IDAs and asset-building policy: Lessons and directions*. St. Louis, MO: Washington University, Center for Social Development. Retrieved from <http://csd.wustl.edu/Publications/Documents/WP08-12.pdf>
- Shobe, M., & Page-Adams, D. (2001). Assets, future orientation, and well-being: Exploring and extending Sherraden's framework. *Journal of Sociology and Social Welfare*, 28(3), 109-127.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Liehart (Ed.), *Sociological Methodology* (pp. 290-312).
- Werner, E. E., & Smith, R. S. (2001). *Journeys from childhood to midlife*. Ithaca, NY: Cornell University Press.
- Williams Shanks, T. (2007). The impacts of household wealth on child development. *Journal of Poverty*, 11(2), 93-116.
- Xiao, J. J. (1996). Effects of family income and life cycle stages on financial asset ownership. *Financial Counseling and Planning*, 7, 21-30.
- Yadama, G., & Sherraden, M. (1996). Effects of assets on attitudes and behaviors: Advance test of a social policy proposal. *Social Work Research*, 20(1), 3-11.
- Zhan, M. (2006). Economic mobility of single mothers: The role of assets and human capital development. *Journal of Sociology and Social Welfare*, 33(4), 127-150.

Table 1
Descriptive statistics of the study sample

Asset type	Median for holders	Mean (<i>sd</i>)	(%)	Range
Home value (\$)	40,000	43,502 (23,468)	24	0-110,000
Liquid assets (\$)	350	1,061 (2,475)	86	0-31,200
Retirement assets (\$)	1,600	3,563 (6,189)	21	0-50,000
Total liabilities (\$)	8,000	15,752 (20,095)	94	0-108,500
	<i>n</i> (%)	Mean (<i>sd</i>)		
Age		40.6 (10.32)		
Education				
No college	263 (31%)			
Some college	355 (42%)			
Two year degree	124 (15%)			
Bachelors degree	96 (11%)			
Marital status				
Married	218 (26%)			
Number of children		1.7 (1.31)		
Male	167 (20%)			
Race				
African	344 (41%)			
American				
Other	494 (59%)			
W1 Income-needs ratio		1.26 (.69)		
W3 Income-needs ratio		1.73 (1.31)		
W1-W3 Job loss	187 (22%)			

Table 2

Pearson correlations between assets, indicators of economic stress, and financial strain

	1	2	3
1 Assets Wave 1			
2 Y1 income-to-needs Wave 3	.27***		
3 Y2 job loss Wave 1-Wave 3	-.24***	-.47***	
4 Financial strain Wave 3	-.41***	-.40***	.41***

*** $p < .001$

Table 3

Measurement model of the latent constructs in the model of assets and family demands

Latent variable	Indicator	Loading
Assets	Home value	.63 ^a
	Liquid asset value	.59***
	Retirement asset value	.43***
Financial strain	Afford suitable home	.69 ^a
	Afford suitable furniture	.89***
	Afford car and transportation	.78***
	Afford adequate food for family	.84***
	Afford medical costs	.66***
	Afford clothing	.92***
	Afford leisure	.85***
	Afford to pay bills on time	.84***
	Have money left over at end of month	.75***

Note. ^a fixed parameter; standardized estimates.

*** $p < .001$

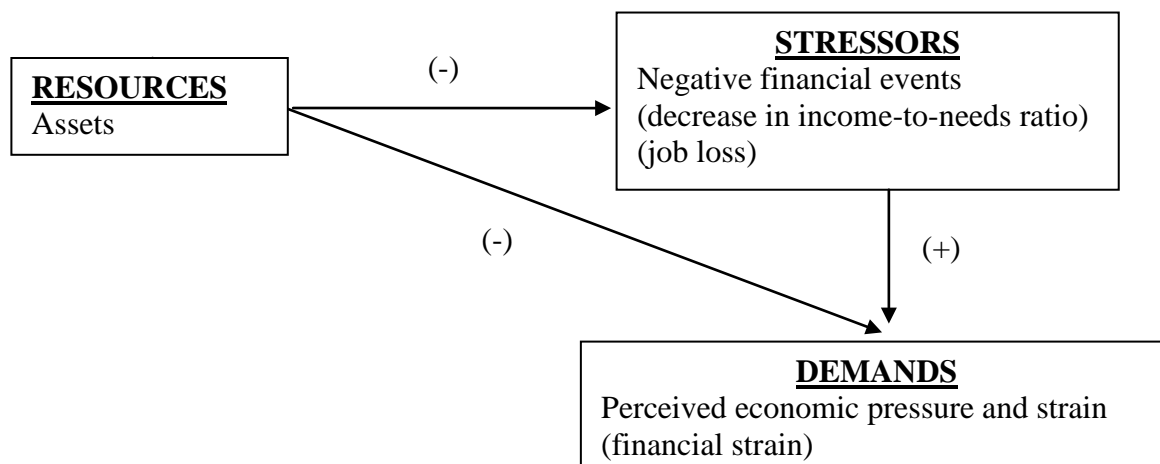


Figure 1. Conceptual framework for how assets functioning as a stress-suppressing variable.

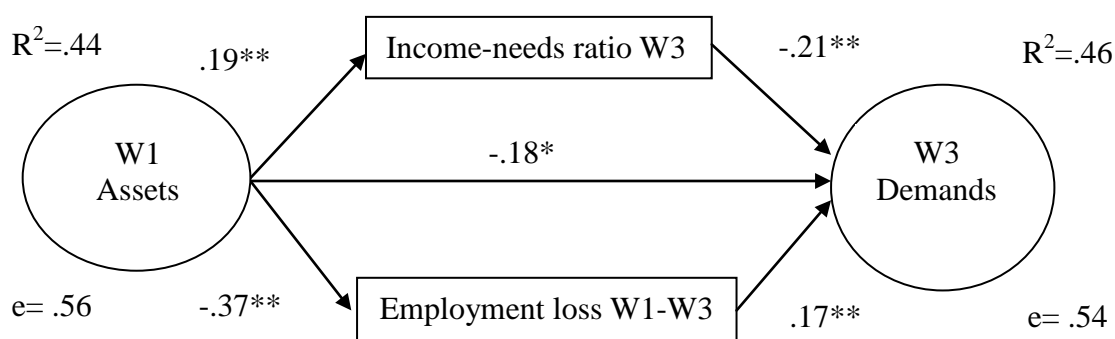


Figure 2. Structural model of the relationship between assets in a model of economic stress on the family.

$\chi^2(179, N=763) = 590.67$ $p < .001$; CFI = .90; RMSEA = .05. Wave 1 Demands controlled. Control variables not shown. Standardized path coefficients. $*p < .05$; $**p < .001$